Section 2

STRATEGIC DIRECTIONS AND INITIATIVES

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FEATURED IN THIS SECTION

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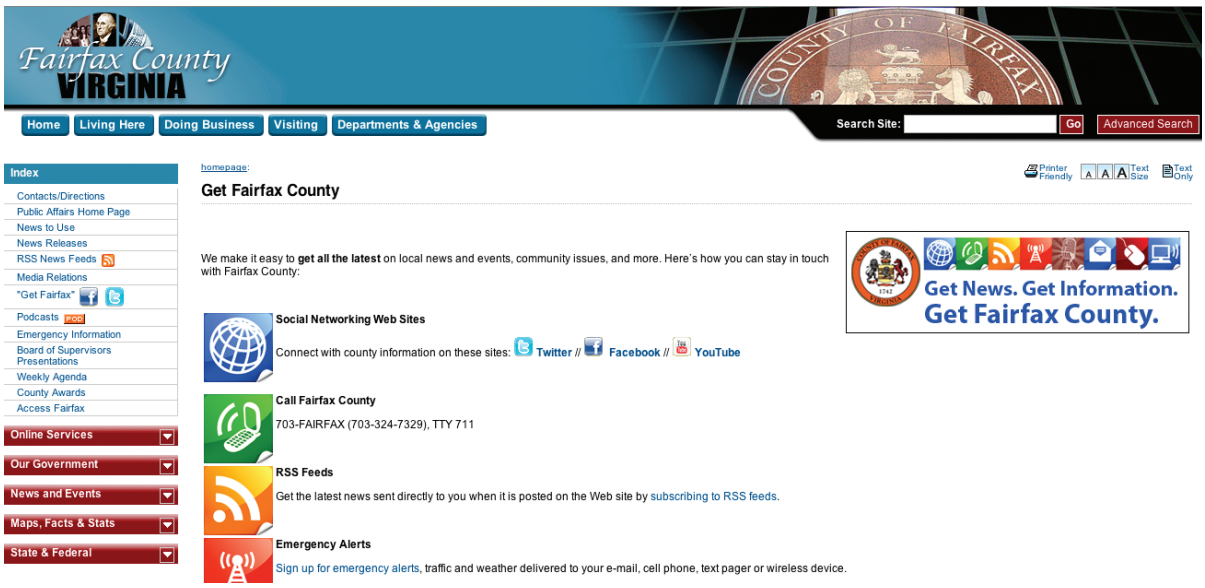
The most critical challenge facing technology providers is to stay current with the rapid pace of change in technology while harnessing innovations effectively to promote an organization's strategic goals, optimize service efficiencies, and successfully meet end-user and public expectation. Advances in technology facilitate the delivery of better and faster service at a reduced cost. However, investments in technology are expensive and incorporation into an organization's business complex. New technology must be adopted carefully and integrated wisely into the existing technology infrastructure of an organization so as to minimize operational disruption and maximize the benefits in cost effective manner. The following nine strategic initiatives address the County's objective of providing effective, efficient and customer-oriented access to data and services for both constituents and internal government customers on an enterprise scale.

2.1 E-government

The e-government initiative is a foundational program supporting the County's goal of a "government without walls, doors, or clocks". The comprehensive strategy uses enabling technology, policy and processes that integrates the Fairfax County Web Site www.fairfaxcounty.gov, Interactive Voice Response (IVR) platforms, and incorporates Cable TV platforms, the County's Public Access sites in Libraries and Access Fairfax sites, and the County's Communications Plan for comprehensive and cohesive access to information and services that span over fifty agencies. In addition to the on-going efforts to enhance the look, feel, navigation and search capabilities of the Web, and deploying new services and transactions, the strategy incorporates CRM and Content Management tools for wide-ranging service options. The County has achieved much success and acclaim for its e-government focus in integrating the WEB and IVR platforms that offer a wide variety of channels for complete on line public access capabilities to services and programs, that also included strategically placed Cris Kiosks. The Kiosk were popular, but with the widespread availability of more internet based on-demand applications and the rapid growth of personal devices including PDAs, I-phones and other devices, the Kiosk program is being retired. In FY 2010 the County will continue its efforts to add new services to the e-government channels, including new transactions, e-payments and enhanced search capabilities. The e-government program will continue to



Fairfax County Website

work with the Commonwealth of Virginia, regional partner municipalities, and federal government agencies in interoperability of common service portals and developing web services standards to enable cooperative access and seamless integration of information and services regardless of the origin or the source.

In FY 2008 major e-government initiatives included new applications such as Special Needs Registry, Social Needs Registry and Library Audio Books. The County expanded offerings in mobile access by making the County's public website accessible via wireless devices www.fairfaxcounty.gov/mobile which enabled citizens to interact with County government through personal wireless devices. Additionally, the County continued to work with Homeland Security on regional interoperability initiatives to establish policies, procedures and protocol for data exchange in support of emergency planning and response.

In FY 2009, a major redesign of the County's Web site was undertaken which updated the look and navigation of the 34,000 page site with new functionality and content enhancements and innovative features. The new design included consistent left-side navigation for all pages in order to deliver user friendly access to county-wide services and information throughout the site. A highlighted news section provides easy access to information categorized by topics and brings into focus County functions, departments and agencies, county-wide initiatives and featured services. The implementation of the Google Search Appliance augmented the overall search functionality of the Web site. The Web site introduced a fresh color palette with a white background, along with text only, printer friendly and text resizing features to enhance accessibility, and advance the County's long standing e-government strategy of creating a government without walls, doors or clocks by providing a conduit to carry out on line business with the County 24/7. The public Web site is also a part of the **"Going Green Initiatives"**

Thus far, efforts have largely been focused on providing access to services. However, services are only part of the relationship between citizens and government. Fairfax County is expanding its efforts to provide citizens the necessary tools for engagement, interaction and participation with County government in order to improve communication and services (Citizen-to-Government Networking). During FY 2009, the Website was one of several channels used for public input to the County's FY 2010 budget planning process.

On going strategy include 'Sharing' which has become an integral part of the Web experience. It is referred to as online collaboration, and known as Web 2.0, social networking or social media. A few examples include wikis (community developed reference material), podcast (subscription based audio information), RSS or Really Simple Syndication feeds (subscription-based information), Second Life (virtual reality) and Twitter (social networking). The extensive use of Web 2.0 in social networking enables wide spread collaboration and information sharing, and enables the rapid sharing of information and news worldwide.

Multiple tools assist interested citizens learn more about County's operations, programs, and activities. The County has long made it possible for the public to sub-scribe to information published through e-mail (http://www.fairfaxcounty.gov/email/lists/), and is increasing the breadth of available information through various e-channels. The County provides RSS feeds (http://www.fairfaxcounty.gov/rssfeeds/), which allows users to have information sent to them through tools explicitly designed to track published information. The County continues to expend access to information through County podcasts (http://www.fairfaxcounty.gov/podcasts/). Three county-wide pages have been launched on leading social network sites: (http://facebook.com/group.php?gid=7901829756 – account required), Twitter (http://twitter.com/fairfaxcounty) and YouTube (http://www.youtube.come/user/fairfaxcountygov). Posting content on these sites (which reach millions of people) allows the County to access an expanded, and potentially younger, audience than it has in the past. The Office of Public Affairs maintains the content for these sites, which is often repurposed from existing material.

The County's Get Fairfax County campaign (www.fairfaxcounty.govgetfairfax), consolidates all the ways residents and employees can stay connected with the county, including: the social networking sites, information available on 703-FAIRFAX, News to Use, e-government services, podcasts, RSS feeds, Weekly Agenda and emergency alerts.

In FY 2010 efforts will focus on developing additional content for currently supported e-government channels and harnessing communication and web based e-community technologies in order to empower the public service of tomorrow. Developing policies and procedures for publishing County information, making services available through shared sites in the public domain to reach a broader audience, and delivering content and services through additional channels will remain strategic goals of the e-government program. Building new e-service transactions and e-payments, continued navigation improvements, improved content synchronization from disparate sources, addition of enhanced interactive features to the WEB site to expand and improve applications such as a Special Needs registry and supporting emergency response situations remain a strategic focus. In addition, DIT will continue enhancements to the e-government channels for compliance with Section 508 for accessibility; and maintain the ultimate goal of facilitating the delivery of integrated and accurate information to citizens via multiple platforms along with implementation of additional web search capabilities. The on-going strategy includes incorporation of more interactive input on WEB site usability and metrics, and WEB 3.O with focus on metadata needed for on-line intuitive search and intelligence.

Fairfax County Twitter

Customers Served

IVR: 4 million since FY 2005
Web: 34,000 pages - 52,445 visitors per day, more than 1,600,000 visits per month
Unique visits: 7,757,364 (FY 2008) i.e. *user access multiple pages or conduct business*
E-services: 125

Information and Services Available

Adult education classes	Web
Becoming a child-care provider	Web
Board Meeting minutes (searchable)	Web
Budget information and approved budget	Web
Bus tour schedule	Web
Child-care provider list	Web
Collection of household trash & recyclables	IVR
County Code – full text	Web
County demographics	Web
County maps, scrollable, printable	Web
Courts – Circuit, General District, and Juvenile	Web, IVR
Crime statistics, Wanted List, Neighborhood Watch	Web
DTA EPay	Web
iCARE DTA Real Estate Assessment and Information Query	Web
Library Picture Books	Web
Public Meeting Calendar	Web
Fire & Rescue Media Information	IVR
Health Information Web, IVR, Inspection scheduling status	IVR
Information for victims of crime	IVR
Job opportunities	Web
Library information line	IVR
Multi-jurisdictional information	Web
My NeighborhoodWebNewcomer information	Web, IVR
Parks/Recreation information	Web, IVR
Public safety information	Web, IVR
Real estate property assessment & tax information	Web, IVR
Seniors information and programs	Web, IVR
Frequently Asked Questions	Web
RSS Feeds	Web
Podcasting	

Doing Business with the County

Access Health Department food inspections database	Web
Access GIS aerial photography with pan and zoom	Web
Apply for County jobs	Web
Apply for a library card	Web
Board of Supervisors compliant forms	Web
Building Permit Fees Estimate	Web
Download request for proposal/invitation for bid	Web
Electronic Mailing List	Web
Estimate Electrical Permit Fee	Web
File complaints about landlord or consumer problems	Web
Find location of closest Library by entering zip code	Web
Register & pay for Park Authority classes, camps, & tours	Web, IVR

Library Audio Books	Web
Obtain permit/plan status	Web, IVR
Pay taxes with credit card	Web
Pay taxes via eCheck	Web
Pay traffic tickets with credit card	IVR
Query current real estate property & tax information	Web, IVR
Query Human Services online " Resource Guide"	Web
Query for current position on the Housing Waiting List	IVR
Query specific court case information	IVR
Query status of an inspection, permit, or planWeb,	IVR
Query Victim Services data for offender release date info	IVR
Register a vehicle	Web
Request faxes of court fees and procedures	IVR
Reserve a golf tee time	Web
Reserve/renew Library books – search catalogue	Web
Reserve a picnic area	Web
Report change of address for tax purposes	Web
Report a lost pet	Web
Report a zoning or noise ordinance violation	Web, IVR
Search for information in historical newspaper	Web
Search for County agency telephone numbers by keyword	IVR
Special Needs Registry	Web
Sheriff Service Civil Process	Web
Subscribe to County publications	Web
Social Needs Registry	Web
Volunteer to help in the Library or Parks	Web
Zoning and Noise ordinance compliant form	Web
Athletic Facilities Application Request (AFAR)	Web

2.2 Enterprise Content and Document Management

The County established a strategic approach to content and document management by developing an integrated solution on an enterprise platform. Content Management is the foundation for the organization and use of information from structured data (through business applications), and unstructured data in electronic or imaged documents (word processing documents, spreadsheets, e-mail, and reports).

The County continues to develop an enterprise information architecture which frames this plan and becomes a tool for web services, applications development, and web static page content search and navigation. The solution includes a rich document management capability to allow for more efficient flow and storage of vast quantities of required paper records. The enterprise document management technology with incorporated workflow solutions improves business process efficiency and productivity by providing the capability to view hard copy records through automated applications in order to provide required services. In addition to fast and reliable business processes, the document management solution minimizes the need for storage of paper records, reduces storage space needs, protects against mounting storage costs, and reduces human and physical plant asset risks associated with handling voluminous stacks of paper.

Business Reference Model (BRM) is the basis for data classification that aligns with three business areas: service to citizens, support delivery of services, and internal operations and infrastructure. These areas are subdivided into thirty-five separate lines of business which cut across all agencies. BRM provides the foundation for Enterprise Information Architecture and allows for data integration across lines of business within the County. BRM serves as the foundation of a more exhaustive taxonomy and facilitates improved search and classification capabilities across application data and static content. The classification of data is the first and most important step in correctly implementing an Enterprise Content Management System.

In addition to continued work on the Information Architecture and implementing Documentum's Content Management System, the following has been accomplished:

- Classified the variety of information types currently offered on the Web Site
- Implemented workflow processes and defined requirements for contributing content to the County's Web site
- Piloted delivery platforms for Mobile Content (i.e. Wireless "Contact Us")
- Developed an XML Document Model and Metadata associated with static content
- Implemented the Technical Architecture for Content Management
- Continued work on the Information Architecture including:
  - the "Taxonomy of Services" for the County
  - the Inventory of Systems classified by Lines of Business
  - development of an XML Namespace for the County
  - development of repositories for storing XML Objects
- Developed the template and methodology for agency web files that are currently on the County's Web site

Content management integrates with document management. For business activities that also rely on a variety of documents, the document management initiative employs technology at the beginning of a document's life cycle (originated as hard and soft copy) using the system to catalogue and track the documents and enable automated workflow processes through the entire life cycle. This comprehensive approach and associated implementation of technology is called Integrated Document Management (IDM). In seeking enterprise technology solutions that satisfied multiple needs, the County found that best in breed products for content management engines also incorporated document management needs. The integrated solution is more cost-effective, and provides a seamless integration for use of information found in imaged documents and information in databases and other systems required for a complete business transaction. IDM technology provides the ability to organize electronic documents, manage content, enable secure access to documents, route documents, automate related tasks, and facilitate document distribution.

Document imaging is another component of IDM; despite e-government efforts and often in response to legal mandates many government processes remain paper-intensive and require agencies to store large volumes of paper for extended periods of time. Consequently, many County agencies implement technical solutions to

alleviate the demand for increased storage space, improve business processes, and protect against disasters that can potentially destroy important paper documents. Integrated Document Management solutions encompass core business practices, as well as provide better archival and disaster recovery capabilities.

IDM technology has been implemented in a number of agencies over the past five years, for example, document work flow projects in the Office for Children, multiple initiatives for the Department of Family Services, the Commercial Inspections Division of Land Development Services in the Department of Public Works and Environmental Services to meet the needs of the sewer lateral section and complaints tracking, the core modules of an automated Accounts Payable System in the Department of Finance and on-going work for the Juvenile and Domestic Relations District Court supporting case management. Although the individual departmental business requirements vary for the use of IDM technology, the following benefits and quality improvements have resulted form these projects:

- Increased staff productivity from employees' ability to share and act on accurate information through the delivery of the right documents at the right time
- Enhanced communication and collaboration through shared information
- Improved speed of information and transaction flow throughout County agencies
- Improved access and security through controlled access to sensitive documents
- Reduced time spent searching for critical documents
- Improved disaster recovery through electronic storage and backup of information that is far more secure than paper
- Reduced clerical, paper, printing and storage costs

In FY 2010 the County will continue to support the current initiatives of IDM and workflow technology for projects in the Department of Family Services, Office of Children, the Juvenile and Domestic Relations District Court, the Clerk to the Board, and the Department of Finance. Document management and imaging projects, especially when work flow automation is used, can greatly improve operational efficiency and effectiveness. In addition, these projects deliver enhanced information security. Granular control over each piece of data enables access by authorized users, and only for the specific information they need and are authorized to access. These solutions provide business units with the capability to reduce costs, accelerate business transactions, ensure regulatory compliance, and support cross-department communication. IDM will also be integrated with the County's ERP system project, where images of hard copy documentation may need to be embedded in an electronic profile or case record, such as those involved in Human Resource Management processes.

2.3 Customer Relationship Management (CRM)

Expectations for easy access to government services continue to expand dramatically. Citizens look for ways to interact with their government through channels that best suit their needs. Fairfax County continues to respond to this growing need through the implementation of Customer Relationship Management (CRM) technology applications. CRM provides agencies and their staff improved opportunities for providing citizens quick and convenient access to information about County programs and services.

In earlier adoption of technologies to enhance tracking and response to citizen inquiries, Internet Quorum' (IQ), and 'PHINITY' call distribution technologies were successfully implemented and proved beneficial to both constituents and County offices and agencies. Significant staff productivity and efficiency improvements were achieved in supporting information exchange with citizens through multiple communication channels: in-person, telephone, e-mail, web, and kiosk. Successful implementation in the Offices of the Board of Supervisors and the Clerk to the Board provided enhanced opportunities to record, route, and manage interactions with constituents and organizations, and subsequent phases provided expanded capability throughout the County. The web enabled IQ system replaced several custom applications and provided the expansion of IQ to the Office of Public Affairs, Consumer Protection, Human Rights Office, Department of Public Works and Environmental Services, County Executive and the County's Legislative function within the County Executive's office, Department of Purchasing & Supply Management, Department of Transportation, and the Alternative Dispute Resolution Program.

The Clerk to the Board of Supervisors uses the IQ Boards and Commissions Module to track appointments and nominations to boards, committees, and councils and maintain a complete correspondence history regarding contact with these individuals. Consumer Protection Division's modules include Complaint Tracking, License Administration and Taxicab Inspections. The systems enable staff to rapidly open and begin investigating cases. By expediting the administrative components of case investigations, the initial response time is reduced, resulting in earlier detection of consumer protection violations. The historical research required to discern whether businesses are repeat offenders or not, and how past cases were resolved is now expedited; cross-referencing cases between investigators allows department staff to share online information pertaining to the same or similar consumer protection violations. Further, the system facilitates collaboration between department investigators on complaints and resolution techniques, and also enables citizens to access complaint histories of businesses online in order to research and determine the pros and cons of doing business with those merchants. In addition, the system allows Fairfax County Police access to license information for all solicitors, peddlers, pawn-brokers, massage therapists, taxi drivers, etc.

The Office of the County Executive uses the IQ Legislative Tracking Monitor application to assist County agencies monitor, review, respond to and track state legislation when the Virginia General Assembly is in session. The system includes the automated downloading of legislative bill information from the Commonwealth's Legislative Information System, thus eliminating the need for a legislative aid to manually track constituent requests. The Human Rights Commission uses the system to create, track and report on case workflows allowing the HRC investigators to meet multiple requirements. The system also streamlines complex discrimination processes and addresses privacy concerns for investigator and conciliators.

The FY 2005 'IPHINITY' call center distribution application implemented for Human Services Consolidated Services Planning (CSP) call center offers efficiency in supporting the growing number of people seeking assistance from social services agencies with limited staff that is geographically spread at various sites. 'IPHINITY' is customizable to route incoming contacts based upon selected criteria, set levels of access, record specialize voice promotes, manage calls based on specific business requirements, and track all interactions to ensure closed-loop resolution. CSP is able to monitor and mange workload and performance with a comprehensive set of analytical tools for real-time and historical reporting. Computer Telephony Integration (CTI), internal calls or transferred calls are presented to case worker along with a "screen-pop" of information from agency case systems and databases relevant to the citizen's call. This integrated approach provides CSP the opportunity to better develop relationships with citizens and more effectively focus resources to address their needs.

Enterprise CRM supports a holistic view which aids in making well-informed decisions about service delivery to the County's diversified population and improves communication through a seamless unified access to information via the County's web site, IVR systems, cable TV, in-person, as well a live 311 Agent. A project steering committee consisting of DIT and agency staff that use or have

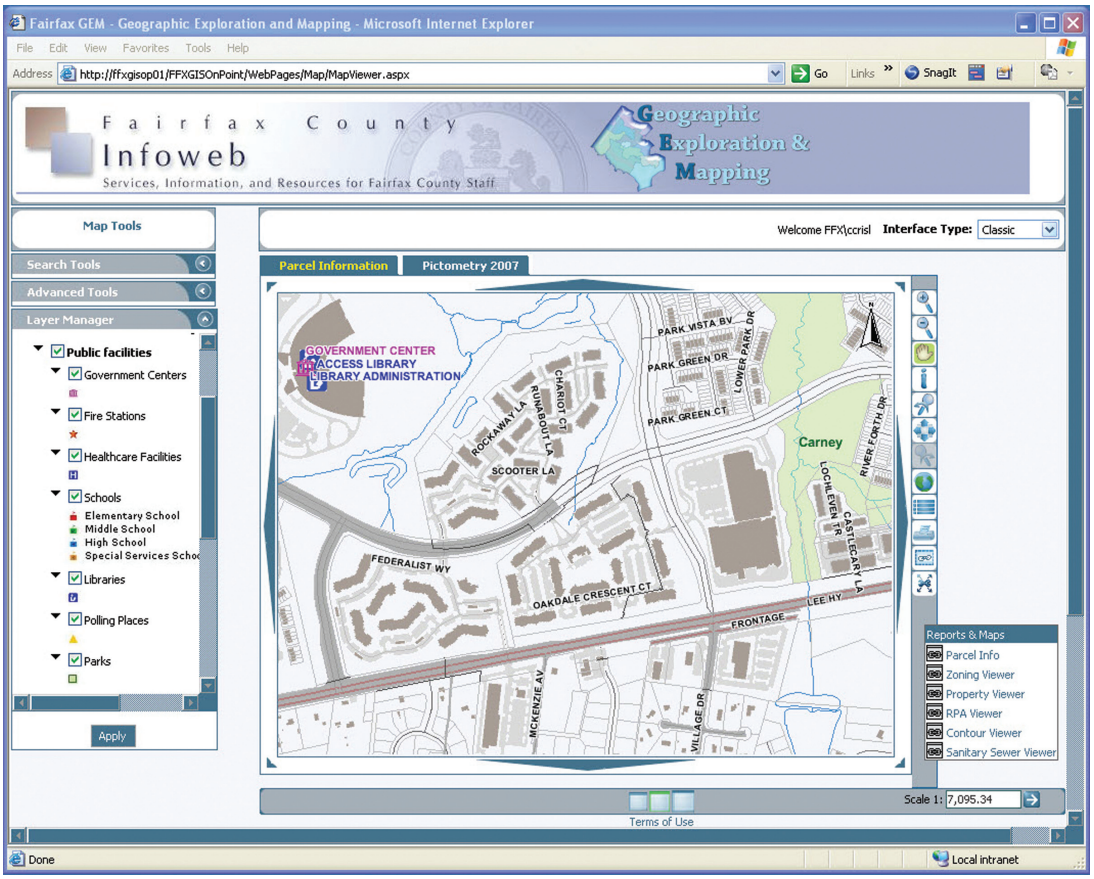
interest in call center functionality was established to manage the implementation and integration of the CRM software within the County's infrastructure environment. Initial efforts involved development of the overall framework and pilot application in the Office of Public Affairs which was successfully implemented in FY 2008. CRM application was also deployed to support Office of Public Affairs customer center sites in several locations. Frequently requested information and telephone numbers for County services and home owner association data is available in a centrally used knowledgebase to support consistent distribution of information. The Office of Public Affairs processed over 33,550 requests for County information and resources since deployment of the CRM application.

Office of Public and Private Partnership (OPPP) is the clearinghouse for partnership information in Fairfax County. CRM efforts in OPPP have consolidated disperse contact list, business partners, and resources enabling staff to utilize the system as a data depository for contacts, accounts, cases, service requests, solutions, correspondence, activities, and allocation of staff and volunteer resources. Additionally, the CRM solution was implemented in the Lee and Dranesville District Board of Supervisor offices in October 2008. The goal in FY 2010 is to provide continued support for agencies and enable screen pop interaction with case record information, contract interaction records and profiles, and transparent case escalation.

2.4 Geographic Information Systems (GIS)

Fairfax County's GIS has continued its growth in FY 2009 with over 700 direct GIS users as well as many indirect users who can use GIS embedded applications as part of their business operation. County staff access GIS directly via professional GIS tools and web applications while the public is able to access a wide range of GIS integrated applications.

In FY 2009 an internet web 3-D GIS tool was implemented which enables agencies and the public to view GIS data along with 3-D models; the County currently has 3-D models for over 3 sq. miles of Tyson's Corner and over 5 sq. miles of the Reston-Herndon area.



In FY 2009 the GIS branch expanded the use of GEM intranet web GIS tool. Substantial effort was dedicated to preparing street centerline data for the new CAD/911 system which will go live in FY 2010. The work done previously in developing the Multimodal transportation model was essential for the implementation of the new CAD. Overall GIS usage has steadily grown since 2001. As shown in figure 1, the volume of GIS data served directly to users or via the internet has consistently increased, with the monthly average for the year approaching 5 Terabytes.

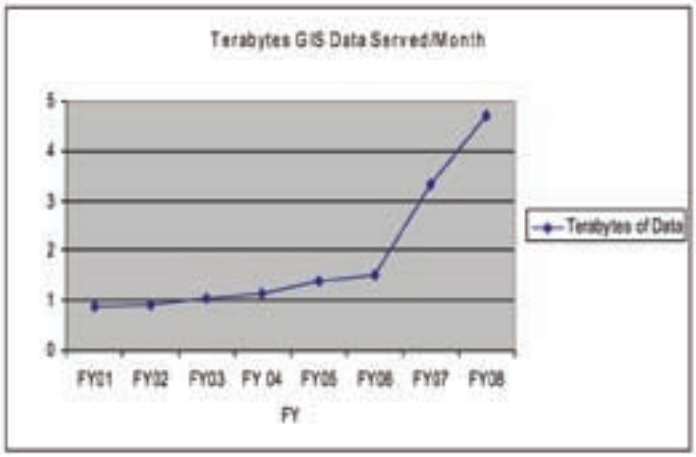


Figure 1:

The GIs data warehouse now holds over 800 layers of Fairfax County data and several hundred more of neighboring jurisdictions. The overall size of the vector data stands at 103 GB (including business data tables), and the raster data is now over 2.9 TB on line and an additional 3.9TB currently archived that will be moved to production.

The volume of data in the Digital map viewer increased as the last of the historic property and zoning map books were scanned and added to the database. Currently there are over 30,000 pre-made maps and images of historic maps available online. The application's usage has continued to increase as well, with views and downloads in excess of 32,000/month. The volume of data within the layers has continued to increase. Table one illustrates the most significant layers.

In FY 2010 the GIS branch will continue to enhance the existing applications and GIS data, with particular attention to centerline data. The County will partner with the neighboring jurisdictions and the state to develop a locally maintained, regionally routable centerline data set valuable for emergency response across jurisdictional lines. Also planned for FY 2010 is the release of an enhanced My Neighborhood version 2 with additional features; My Neighborhood currently serves over 5 million maps/images per month. The volume of data within the layers has also increased. Table one illustrates some of the most significant layers and their 2005-2009 values, along with additional values that have recent data:

In FY 2009 a substantial effort involved preparation for President Obama's inauguration in January 2009 with the preparation of numerous maps necessary for extensive coordination among emergency response agencies across the national capital area. GIS staff continues to be heavily engaged in the CAD/911 planning and implementation, as well as a range of emergency response services to support the Office of Emergency Management. Figure 2 illustrates a screen shot of a preliminary map version from the new CAD/911 system. That system will place maps in all county emergency response vehicles and provide substantial new capabilities to emergency responders.

Table One:

Data Layers	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Parcels	341,000	343,500	356,000	357,300	358,300
Addresses	360,000	365,000	368,000	364,700	365,100
Building Outlines	248,000	252,000	257,000	257,277	257,300
Miles of Roads	4,000	4,800	4,700	4,718	4,736
Number of streetlights			57,939	58,935	59,937
Linear miles of sanitary sewer lines			3,350	3,373	3,390

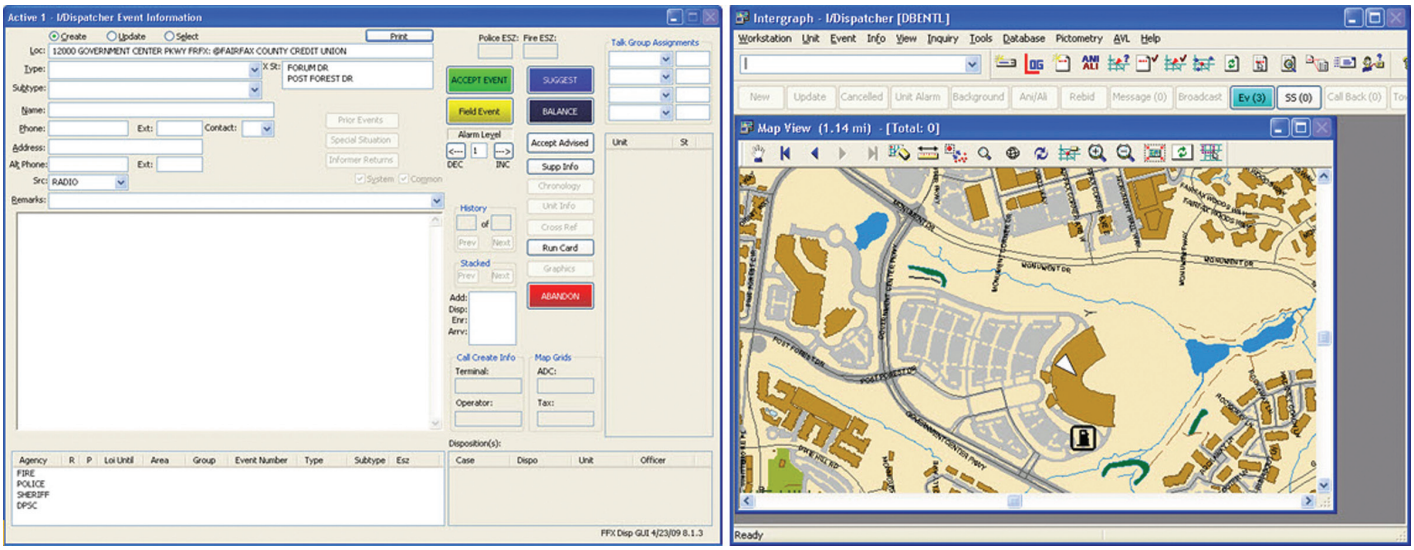


Figure 2:

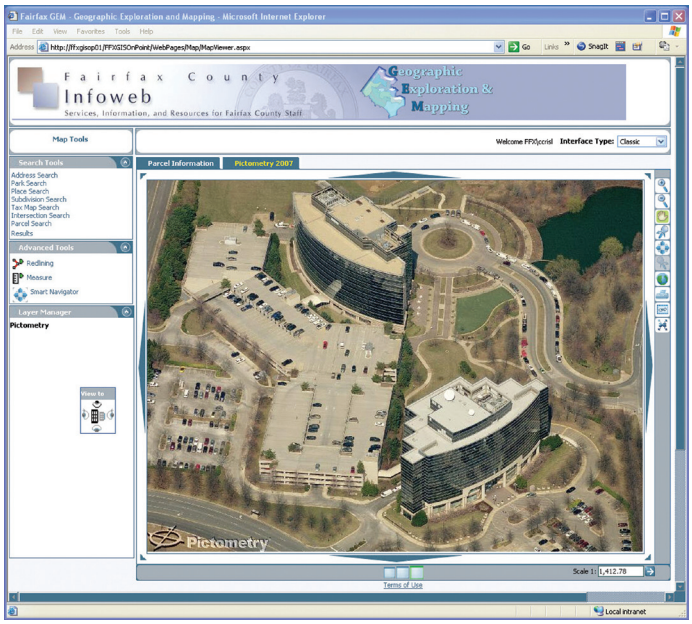
The Master Address Repository (MAR) project, completed in FY 2006 has proved invaluable for the new CAD/911 system. The MAR is the authoritative source of (situs) addresses in the County, which are essential for effective operation of the new CAD/911 system. Additionally, in a joint project with the County's Department of Public Safety and Communication (responsible for the CAD/911 system) the MAR data was checked against post office data and also cross checked against telephone companies' Master Street Address Guide (MSAG) to ensure accuracy in routing 911 calls.

In FY 2009 and into FY 2010 GIS will work with County demographer in preparation for the 2010 census. The initial work identified and provided a list of all residential addresses in the County to the Census Bureau using the data in the Master Address Repository. The Census Bureau reviewed the data and noted that it was the most complete and accurate file they had seen in the regional office. Subsequently Census will compile a list for County verification and review which becomes the basis of the 2010 Census visits and mailings. The MAR is critical in ensuring both the speed and accuracy of the process.

The availability of key County data digitally through the GIS provides a range of benefits to constituents as well as County staff. Orthoimagery is widely used within GIS as well as over the web. Since the parcel and zoning data is now maintained digitally, production of the County's parcel and zoning books were greatly accelerated. Time consuming manual steps were replaced with the digital production process enabling staff to capture other features in the GIS (e.g., more easements, particularly conservation easements). Additionally, map changes are posted to the internet daily, providing web users of the Digital Map Viewer with the latest versions of the maps. Prior to these enhancements maps were printed for distribution annually. Digital production has enabled the use of color maps, and development of new symbolization of zoning patterns are added features. The popularity of the frequently updated data is evident by the steady increase in usage of the Digital Map Viewer.

In cooperation with the state's Virginia Base Mapping Program, aerial imagery of the entire County was updated in FY 2009 (previously in 2007 and 2002). In the intervening years, the County independently flew the entire County and acquired orthoimagery of one quadrant per year. The Northwest quadrant was developed from aerial imagery flown in 2001; the Northeast from 2003 imagery; the southeast from 2004; and the Southwest from 2005. This completes the County's first orthoimagery update cycle. Contractual difficulties delayed the state's plan to fly the entire County in 2006, as a result there is no aerial imagery of the County from 2006. Oblique aerial imagery of the entire County was taken again in 2007 (previously in 2005 and 2003), delivered and brought online in FY 2008. Oblique Imagery shows the sides of buildings, which enables County Assessors to more efficiently view and determine property values. The views also provide public safety officials with key information such as window and doors (to determine dimensions and heights above the ground) which aids in planning emergency response.

The planimetric data update project currently underway will update two quadrants of the County dramatically



improving the quality of existing planimetric data acquired from stereo imagery in 1997. In FY 2009 compilation work on updating the planimetric began in the SE quadrant of the County including Ft. Belvoir and much of the Laurel Hill area. This is a jointly funded project between DPWES and DIT, the intent is to update 25% of the County annually, ensuring that the planimetric data will be no more than 4 years old. This data has been requested by Fairfax County's Environmental Quality Advisory Council (EQAC) and a number of County agencies. The updated planimertic data will be a foundational component of the new Computer Aided Dispatch system's maps.

Over 25 County agencies use GIS to in their operations, including the GIS branch itself. These include:

- The transition to digital property and zoning information enables the GIS Branch to maintain these maps daily. These maps are processed and made available for County staff and public users via the web; since the production process is digital, more map series can be easily added. In FY 2008 the soil series was added to the digital map viewer, in FY 2009 the new soil data based on the countywide soil evaluation program conducted jointly with the federal Natural Resource Conservation Services and the Northern Virginia Soil and Water Conservation District was added to the digital map viewer.

- The centerline file was modified to reflect the Northern Virginia common centerline elements and made available to County agencies and is being enhanced with additional data needed for CAD and for regional routability of emergency response vehicles.

- Substantial savings are realized in the Department of Public Works and Environmental Services through the use of GIS. The agency was recognized by the State of Virginia for integrating GIS with refuse vehicle routing for additional flexibility and cost savings.

- GIS technology enabled the Department of Public Works to complete the mapping involved in the Streams Characterization Project in weeks rather than months.

- The Department of Public Works digitized the sanitary sewer lines into the GIS and maintains them regularly. Storm sewers digitization was completed and is now in the GIS data warehouse. The data is also available in the My Neighborhood application. The Department also uses GIS as part of its automated sanitary sewer permit application tool which greatly speeds preparation of the permit by automating cost calculations. GIS is also used to help call takers identify problem areas and prepare work orders.

- The Department of Zoning has digitized the Comprehensive Plan into the GIS for easier maintenance and viewing. The agency uses GIS in the urban design project for Tyson's Corner and has performed 3-D visualization work to better understand the proposed developments.

- The GIS now contains data from Fairfax Water and the Cities of Fairfax and Falls Church on hydrants and water mains.

- The Department of Transportation uses GIS to help plan pedestrian safety projects and analyses.

- The Health Department used GIS to conduct emergency preparedness planning, track unhealthful soil deposits, track well and septic systems and notify citizens when necessary.

- The Park Authority uses GIS for a wide range of planning and management activities. It uses GIS to indentify candidate properties for purchase by the county to improve park resources.

- Oblique and Ortho imagery are now available to 911 dispatch personnel, adding improved response evaluation.

- The Department of Planning and Zoning uses GIS programming and analysis to handle tasks that would have been overwhelmingly manual in the past. The assignment of regional transportation analysis zone numbers to each of the County's' 356,000 individual parcels has made this a routine and quick process. GIS streamlines the Area Plan Review (APR) through the use of a new Comprehensive Plan Amendment Tracking System (CPATS) which uses GIS to generate notices for plan amendments applications. This has largely eliminated errors and provided easy access to the latest information. GIS is integrated into DPZ's Land Information Systems (DPZLIS) with a number of benefits including, easy and quick access to staff report map, generating environmental assessments, and custom page size maps of any county location. These specialized features have been particularly beneficial in zoning enforcement issues where public can now view maps to check permit and enforcement cases via the internet.

- The Department of Transportation utilized GIS for a variety of agency needs and projects. GIS provided tremendous insight in understanding and predicting commuter use of Park & Ride facilities and helps direct the department locate and manage new/ potential facilities. In addition, Department of Transportation uses GIS technologies for the Fairfax Connector bus system's demographic analysis, route planning, and bus stop management. Many of these techniques are also used for the Employer Services program to best promote commute alternatives to Fairfax employers and their staff. GIS is used to plan and analyze bus stop locations and pedestrian safety improvements.

- In health areas, GIS has been used as part of the West Nile Virus planning and response, as well as tracking tuberculosis in the County. Previously GIS had proven its value in the canker worm outbreak in FY 2001 (and before that the Gypsy Moth outbreak). GIS enabled County staff to quickly identify residents who could be affected by planned canker worm spraying and contacted them ahead of time. The GIS also provided spraying coordinates to the helicopter spray crews so that balloons would not have to be used, which was a significant time and cost savings. Drinking water wells have also been identified and entered into the GIS.

- The Fire and Rescue Department (FRD) makes substantial use of GIS and as a result is experiencing significant savings. For instance, in the process of responding to Fire Hydrant and Insurance queries, the GIS saves about 50% of staff time in determining distances. Additionally a 98% staff time savings were estimated in the countywide analysis of identifying five-minute response time areas for fire stations – a factor crucial to establishing areas within response time limits.

- The Police Department has had significant success in its use of GIS for crime analysis. In multiple instances, the Department's crime analysts identified spatial patterns in crime incidents, successfully predicted subsequent crime locations, and arrested suspects. The training of police crime analysts as criminal profilers is heavily dependent on the use of GIS. In addition, the GIS Branch completed development of the My Neighborhood Police Incident viewer.

- GIS was used extensively in planning the response to flooding in the Huntington area. The GIS maps were helpful for both field personnel and staff in the Alternate Emergency Operations Center.

The breadth of GIS utilization across the County, and the extent of its integration into the overall IT architecture are reflected in the award winning plans and efforts of the preceding years. The awards recognize GIS's achievement in fostering and expanding the use of GIS applications to improve County operations:

- The County's GIS program received a "Best of Breed" award in the 2003 Digital Counties Survey. This survey and award recognition was conducted by the Center for Digital Government, in partnership with the National Association of Counties.

- County GIS programs received the VA Governor's Technology award for DPWES' use of GIS in routing refuse collection vehicles.

- In FY 2005 the County's GIS won FOSE's E-Town Award for GIS Integration.

- Fairfax County's GIS received international recognition via the Environmental Systems Research Institute (ESRI) Special Achievement in GIS (SAG) Awards for both the GIS Branch work and the countywide efforts in GIS.

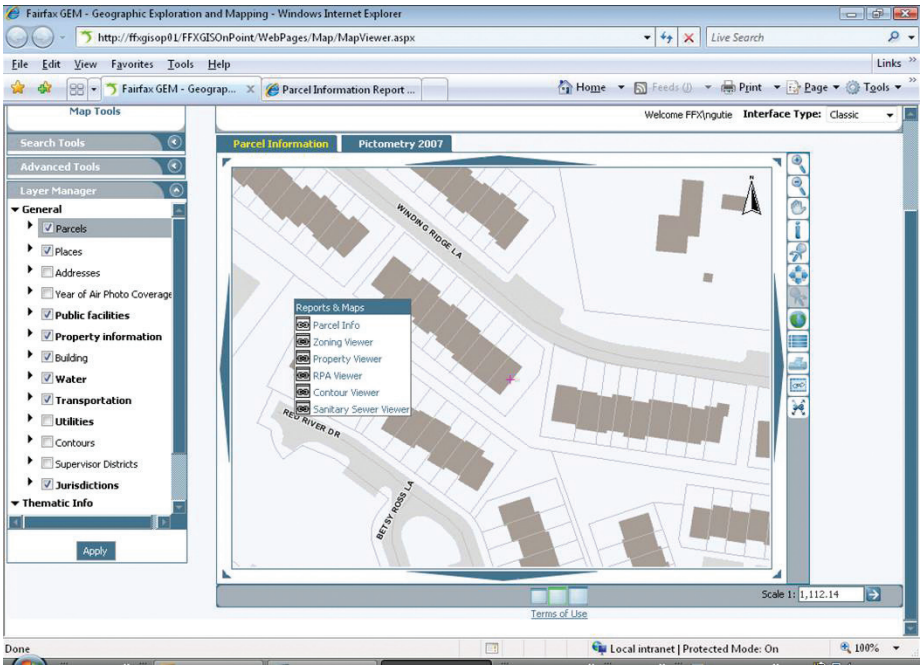
- The National Association of Counties recognized Fairfax County for its use of GIS in the reapportionment process.

Fairfax County is a member of the Northern Virginia GIS managers group, an informal group that regularly meets to

coordinate activities. The most recent accomplishment is acquiring support from the State's Wireless Board through the Virginia Geographic Information Network to build on the past centerline work and develop a regional, routable centerline data set. This work laid the foundation for a state wide routable centerline model. It will enable routing of public safety vehicles across jurisdiction boundaries. The GIS Branch works closely with the State's GIS agency (Virginia Geographic Information Network, now part of Virginia integrated Services Program), and now directly participates in the Emergency Operations Center when it is activated.

The GIS Branch continues its strategic interaction with County agencies to foster development of GIS capabilities and integration into their business processes. The preceding years have seen GIS take root in most County agencies. The program will continue to expand and is an important tool or Public Safety, Homeland Security and Emergency Management. The County is a member of NACo's GIS committee which looks at key GIS issues affecting counties; and the County's GIS manager is a member of the Council of Government's CIO's GIS subcommittee, working on regional interoperability initiatives and pursuing projects and funding to enhance regional GIS.

The County's GIS program will continue to ensure data quality, system reliability and connectivity as well as implementation of new GIS applications. These aspects are crucial to implementing GIS as a data "utility" across the County so that users at any of the County's offices can "turn on" their GIS "data tap" and have all of the data they need available. Data quality is a paramount issue; rigorous Quality Assurance/Quality Control measures have been implemented on the parcel data updates. Similarly, rigorous quality standards were developed for the aerial imagery being acquired and the planimetric data. System reliability is an increasingly crucial issue as more users integrate GIS into their daily operations. The GIS Branch monitors the performance of its applications while the DIT's Server Support Division monitors the underlying hardware and communications links to ensure reliability. Critical applications are monitored around the clock and staff is on call if system outages occur outside of work hours. Finally, as the GIS Branch works closely with other agencies, web-based applications will be used wherever possible, staff will design and implement specific applications that will decrease the time necessary for queries and increase the number of staff that can use the data in applications designed specifically for their operational requirements.



2.5 Fairfax Inspection Database Online (FIDO)

The Fairfax Inspections Database Online (FIDO) project is a strategic initiative to enhance and consolidate inspection services provided by multiple County agencies into a single software solution that includes e-permitting capabilities for customers. The system has enabled the Department of Public Works and Environmental Services, the Department of Planning and Zoning, the Health Department and the Fire and Rescue Department to collaboratively provide permit issuance, inspection, and code enforcement services to Fairfax County citizens and business partners.

Goals for this project included migrating from the mainframe environment to a platform that enhances multi-agency access and participation in the affected processes, enhancing customer service by streamlining the permitting process, and facilitating 24/7 access to government services via the internet.

The approach for this project represented a concerted effort to harness the expertise of all stakeholders in the acquisition, design, and implementation phases to ensure a seamless, streamlined integration with all other pertinent business processes and systems. A project steering has provided oversight and direction throughout the project lifecycle, and the committee included the Deputy County Executive for Land Development and Public Safety, Department Directors from the FIDO user agencies, the Deputy County Executive for Information and Compliance, and the Chief Technology Officer. In addition, teams of representatives from each of the core user agencies and the Department of Information Technology (DIT) were established to assist in the management of this project and coordination of system requirements from the stakeholders to ensure system compliance with state and local authorities.

Customers and County staff that use the system on a daily basis formed numerous workgroups to provide critical input for the development of the user and system requirements. Additionally, these workgroups included staff of the Health Department, Department of Tax Administration, Fire and Rescue Department, Department of Planning and Zoning (DPZ), Department of Public Works and Environmental Services (DPWES) and DIT. The collaborative efforts of these groups provided input on the needs of all the beneficiaries, with a concentrated focus on the day-to-day customers and the numerous organizations that rely on the County for permit processing and inspection information. Many of these teams continue to work on FIDO system enhancements and modifications.

The FIDO system creates adaptability on a new platform that will serve as the foundation for future e-permitting enhancements while providing immediate additional functionality and a streamlined process. The project will include the acquisition of a web-enabled system with the capability to provide access to permit information and permit process 24 hours a day, 7 days a week. The system will also provide managers the ability to perform an ongoing analysis of efficiency and effectiveness of resource utilization. Additionally, the FIDO project allows the County to maximize e-government capabilities and enhance customer service by providing the public with 24/7 access to land use data and services that facilitate healthy and safe neighborhoods.

Remaining items for FIDO include the design and implementation of web-based permit applications, and improved email notification capabilities for permit applicants and permit related inspection request, and the integration of wireless technologies for FIDO mobile workers including building and code enforcement inspectors. The FIDO solution is consistent with County standards and fits well with County's e-government and green IT strategies of using emerging technologies, as well as with County agencies work productivity and worker mobility goals.

2.6 Enterprise Telecommunications

Contemporary voice communications integrated with voice and data messaging is an organizational requirement in today's technological landscape. As government is asked to do more with less, stretching limited financial and human resources, it relies heavily on efficient voice communications to improve effectiveness in meeting the growing needs of constituents. Whether it is citizen access via e-government; efficient management of government information; the advancement of education; the safety of our children on school buses or homeland security; voice communications plays an enormously critical role.

Integrating voice, video and data communications onto a common structure is now a reality. This convergence brings tremendous benefits to enterprises such as Fairfax County that need enterprise-wide voice and data networks. New types of voice service platforms that support data application integration are commercially available and are seen as a cost effective means of improving County's service to citizens. After decades of high quality phone service provided through the traditional telephone networks, users expect new systems to have consistent voice quality, with never a doubt that they will hear dial tone when they lift the telephone receiver.

The long-term strategy for Fairfax County is to implement Voice over IP (VoIP) services and obtain the maximum utilization of its networking capabilities as well as garner the advantages in functionality and features that this leading-edge technology provides. DIT is implementing a strategy for voice services, utilizing convergent-IP ready technology, over the County's fiber I-Net. This strategy includes a solution architecture that is scalable to support the variety of County sites and agency business requirements distributed over 400 square miles. The strategy uses IP-based telephone service at the smaller sites, so that they can be brought into the common voice enterprise architecture, avoiding investment in converging IP data traffic with IP voice traffic onto one data network. This strategy is both prudent and forward-looking. It will position the County to increase its use of advanced convergent technologies as data, video and voice, and facilitates reductions in other voice service operational costs. The plan is in full alignment with the County's principle of implementing contemporary, but proven, technologies, optimizing IT investments and creating more operational cost efficiencies.

The following six strategic goals for Fairfax County voice services were developed and endorsed by County's Executive management and serve as the building blocks for Fairfax County's Strategic Voice Technology Platform:

	Goal	Solution Element	Benefit to Fairfax County
1	Optimize the total life-cycle cost for voice services	• Centralized Servers • Telephone sets can be moved by users w/o requiring system Programming • Secure centralized management accessible from anywhere	• Reduced cost to update/upgrade • Moves /adds and changes become less expensive. • Additional personnel are not needed to manage the system
2	Provide common voice architecture, County-wide	• Modular, scalable, "plug n'Play" hardware and software components	• Reduced cost to manage and maintain. • Common look and feel of applications and telephones improves productivity of users. • Users and applications are portable; ex. Call Center agents can be anywhere internally or externally and have the same capabilities. • Users can move between sites and take their number with them, with or without moving their phone
3	Provide secure remote access for voice and data to expand Telework	• IP Softphone/Agent with Advanced Encryption Standard (AES). • Unique dual line Softphone, splits network signaling from voice • Citrix support for IP Agent	• Conversations remain private and users can work from anywhere • Simplified operation for remote users that doesn't require QoS and allows use of any telephone • Contact Center agents can be remote and have secure access to applications.
4	Provide compatibility with "best-in-class" citizen access technologies	• Contact Center, i.e. Skills Based Routing. • Mobility Solutions, i.e.Extension to Cellular.	• Maximize # of productive information exchanges. • Citizens can reach County workers even when they are away from their office. • All employees/citizens have same opportunity to access information
5	Develop a survivable architecture that is scalable and flexible	• Layers of redundancy, i.e. mirrored main servers, enterprise survivable processor, redundant components • Modular components	• Unparalleled reliability and resiliency of underlying architecture • Lower TCO as components can be combined and used in different ways like Lego building blocks
6	Prepare for the convergence of voice and data onto one logical network	• Applications are media agnostic. Universal licenses	• Applications can be extended anywhere to any device, increasing productivity, and reducing cost. • Add IP Telephones when and where needed at reduced expense. • Existing features work the same as users move from Digital Telephones to IP Telephones thereby easing transition and increasing productivity

To achieve the goals for next generation voice switch architecture, as discussed above, our strategy takes into consideration a number of technical requirements for the target architecture. The solution must support the County's integrated network philosophy with a single logical architecture. The solution must address the large number of County locations supporting a variety of business and operational needs. The solution must support a range of configurable telephone instruments and feature sets. Finally the solution must also address the following requirements:

- Constituent Relationship Management (CRM) Technology
- Automated Call Distribution/Interactive Voice Response
- Computer Telephony Integration
- Secure Remote Access and Telework
- Unified Messaging
- County-wide Voicemail
- Inbound Caller ID
- Capacity on-demand

The transformation of Fairfax County's voice platform is a significant endeavor that entailed a great deal of planning and thoughtful implementation over many months, but it has a revolutionary impact on the way that the County conducts business and provides services to its constituents. Voice over IP (VoIP) is clearly the strategic technology that the County embraces, using a phased approach to minimize risks at the two core locations. The new voice network infrastructure provides uniformity of telephone features at all County locations and is the foundation upon which to integrate function specific call centers, creating a virtual Constituent Contact Center to streamline incoming call processing while reducing call center operating costs. The new functionality and integration of the voice and data platforms have been implemented in a number of County facilities. Work on this comprehensive project will continue in FY 2010. The replacement of the current telephony infrastructure will serve approximately 15,000 Fairfax County employees. The migration will occur in phases which will allow multiple opportunities and avenues to prepare the FCG community for the transition, and thereby ensure a smooth change of voice project status, system features and functionality, dialing plan information, and changes that users (both employees and citizens) can expect. The project is planned and funded in multi-year phases, with a majority of County sites on the new platform by 2011.

2.7 Land Information Accessibility

In January 2006 the Board of Supervisors established the Fairfax County Land Use Information Accessibility Advisory Group ("Advisory Group"). The purpose was to review how land planning and development information is currently made available to the public, and to make recommendations for accessibility improvements. The target stakeholder audience includes County staff and management, novice citizens, active land use citizens, developers, property owners, and others with an interest in knowing more about proposed and ongoing land planning and development activities.

The final report was accepted by the Board of Supervisors in January 2007. The Advisory Group appreciated the responsiveness that County staff had already provided for the initiative. In addition, they recognized several significant improvements that staff had already implemented since the inception of this Board request, including:

- New web page design to reorganize and consolidate the land planning and development information (http://www.fairfaxcounty.gov/living/landuse/)
- New ability to search the Land Development System using a County address to see all nearby land planning and development cases (on a map or by listing, with drill down capability; http://fairfaxcounty.gov/ldsnet/)
- New ability to search the Land Development System by Magisterial District to see all nearby land planning and development cases (on a map with drill down capability; http://www.fairfaxcounty.gov/ldsnet/).

During FY 2008 and FY 2009 additional improvements were implemented to improve public access to land development information based on funding availability, including:

- Adding Building Permit data to the LDSNET Search by Address\Search by Magisterial options,
- Providing web page accessible land planning and development case summaries in PDF download formats,
- Enhancing the LDSNET and My Neighborhood web page integration to streamline end user navigation.

The Advisory Group recommended that the County embrace and build towards short-term, medium-term, and long-term improvements for land use information. Listed below are summaries of the 12 guiding principles, followed by 17 recommendations.

Twelve Guiding Principles for Fairfax County Land Use Information

The following 12 guiding principles are designed to help maximize public involvement in the land use review and approvals processes, and encourage the continuing modernization of information technologies in Fairfax County's land use review and approval processes.

1. Make land use information publicly available and accessible at the earliest opportunity.
2. Use geo-coding standards across all County databases, land planning systems, electronic development files, and documents.
3. Collect and manage information so that it can be accessed from multiple entry points such as geographic location or by steps in the land use approval process.
4. Make all public land use information easy to find, including information developed by others and submitted to the County, as County-generated information.
5. Ensure consistency and user friendliness across all web pages and across all agencies of the County.
6. Create standard report forms to allow searches across projects and aggregation of those data for use by County citizens.
7. Make sure that information systems and any changes made to them are open and scalable so future needs can be addressed.
8. Tailor land use pages to meet the needs of different user types, and provide information as early as possible about Comprehensive Plan land use proposals.
9. Require external land planners and developers to submit land use application information to the County via electronic files using geo-coding standards; also request 3D modeling and other visualization technology for larger and more complex land developments.
10. Make land use information accessible to citizens with a range of access to tools and resources, including users with no or limited access to the Internet.
11. Establish procedures and provide resources to keep land use information as timely and accurate as possible.

12. Investigate way to increase the dialog and information sharing among all land use stakeholders.

The following 17 recommendations and improvements are intended to be designed and implemented over a number a years:

- **Expanded Application of Land Use Information Tools**. The Advisory Group recommends development of a more integrated and intuitive "front end" web page or portal or repository that enables users to go to one location and search for land planning and development information relevant to their inquiry location; further integration of LDSNet, My Neighborhood, GIS, the Courts Automated Retrieval System (CARS), the Fairfax Inspection Database Online (FIDO) system that contains permits and inspections information, and other related systems; expansion of the My Neighborhood capabilities combined with a data warehouse; providing more land use data that can be imported into a constituent spreadsheet for further analysis.
- **Further Integration of GIS all County Land Use Information Systems**
- **Land Use Public Hearing Information.** For public hearings the County should make available electronically the information currently provided in the hard copy (staff report, proffers, development plans and affidavits).
- **Notification Process Above & Beyond State and Ordinance Requirements.** Fairfax County should study how to provide a process to electronically notify interested citizens about pending land use actions within a user-specified distance of a County address and according to certain categories of proposed land use.
- **Improve Access to Site-Specific Land Use History.**
- **Electronic File Submission and Review.** Fairfax County should update land use review processes to facilitate electronic file submission and review.
- **Citizens and contractors requesting permits should be able to file electronically and utilize address or other information already on file with the County.**
- **Land Use Orientation Page and Activity Calendar.**
- **Verbatim Excerpts and/or Viewable Proceedings of Planning Commission Decision Discussions Should be Available Online.**
- **Collection of Approved Plans and Visualization of Community-Wide Development.** The County should collect an electronic version of approved development plans and build and easily searchable electronic library.
- **Create New GIS Overlays.** The Comprehensive Plan should evolve into a more digital model with GIS layers showing the approved plan with options and alternatives and a layer showing existing property development.
- **Coordination within the County.** The County should work to ensure more cross-departmental coordination and use of spatial data, including public access.
- **Coordination with Other Jurisdictions.** The Advisory Group recommends that County staff stay in close contact with other jurisdictions and other agencies (e.g VDOT) in an effort to make land use information more accessible, to learn about new techniques and technologies, and to participate in collaborative initiatives.
- **Outreach to County Stakeholders such as Citizens and Businesses.** The County should encourage organizations like the Federation of Citizen Associations, District Councils, and larger citizen associations to work closely with Board member offices to collect information about which addresses and parcels are associated with each particular civic or homeowner association.
- **Ongoing Focus Groups.** Some type of periodic ongoing advisory group should meet to monitor progress and make further recommendations.
- **Enhancements to the board Auditorium.** Enhance the capability for speakers and staff to use electronic media presentations and GIS displays in the Auditorium.

The Advisory Group encouraged the County to embrace the concept of continual innovative and incremental improvements as well as longer-term larger improvements as changes in business processes and technology permit. The Advisory Group also recommended that the Board provide consistent funding and sufficient resources to implement these recommendations as well as to sustain ongoing improvements. The final Advisory Group Recommendations are available at: http://www.fairfaxcounty.gov/landusecomm/

2.8 Public Safety Architecture Modernization

The goal of the Public Safety Architecture Modernization Project is to implement an integrated software solution suite to support Computer Aided Dispatch (CAD) and Records/ Information Management Systems (RMS) for Fairfax County's Public Safety agencies. This project has an aggressive time schedule, implementing in multiple phases. It includes the following major components:

- Replacement of the legacy Altaris Computer Aided Dispatch system
- Replacement of the custom legacy mainframe Police Records Management system, and related interfacing shadow systems
- Acquisition of EMS Incident Reporting solution for the Fire and Rescue Department, and upgrading the current Fire Records Management system
- Supporting infrastructure including more advanced GIS, radio integration, broadband wireless, and station alerting

The CAD/RMS is the core of this integrated, comprehensive public safety information management system. The County conducted a procurement process, starting with a Request for Qualifications (RFQ), followed by an RFP and a rigorous evaluation of the proposals in order to obtain a modern, integrated state-of-the-art solution with a proven track record.

This project provides the County's public safety first responders with ready access to the tools that enable sharing of tactical information, often in real time and on-site, with a number of different entities such as emergency management agencies; neighboring Public Safety Access Points (PSAP) and Police and Fire departments; as well as state and federal authorities including Department of Defense components. These requirements are particularly critical for the County and other jurisdictions in the National Capital Region and are consistent with NIMS guidelines.
There are numerous technical and functional improvements a new system will offer the County, and many are considered "baseline" products in current generation CAD and RMS applications. This new solution will include the following essential technical improvements:

- Integrated CAD/Records Management System for Police and Fire Rescue – The current Police Records Management System is twenty years old, not integrated with CAD, and well past normal life cycle replacement. It does not support modern law enforcement and crime analysis activities.
- Automatic Vehicle Location (AVL) – The current CAD does not support GPS technology and applications to track the locations of public safety units. This is a vital feature to insure personnel safety, as well as operational capabilities such as nearest unit response and appropriate resource utilization.
- Nearest Unit Response – Efficient routing based on quality mapping data, in combination with AVL will provide the fastest response to the scene and insure that the closest, most appropriate unit is provided with the optimal routing.
- Standards-Based GIS Capability that will integrate with and leverage existing County's GIS data layer and mapping resources. Geographically represented data and information is essential to all public safety agencies, for both after action and statistical reporting, and for on-scene response and incident management. Integrated standards based GIS capabilities will enable the County to leverage technology resources and skill sets across the enterprise and increase efficiency.
- Standards-based interoperability to support both internal County data and information sharing across public safety and related agencies, as well as critical external data and information sharing such as CAD to CAD, interoperability with Virginia Department of Transportation as well as Virginia State Police will provide collaborative incident response with neighboring jurisdictions supporting mutual response.
- Up-to-date tools that improve system administration, enabling the County to better manage and own its application and increase the ability for Public Safety to respond quickly and effectively to changing needs, and reduce reliance on third-party support and overall system maintenance costs.
- A non-proprietary, standards based system architecture built on a standard platform that reduces the frequency of costly and invasive forklift replacements based on hardware obsolesce. This improves the County's posture for planning refresh cycles, warranties and maintenance plans.

This initiative is governed by an executive level steering committee, the Public Safety IT Governance Board, whose

members include two Deputy County Executives, Director of the Department of Public Safety Communications, Chief of Police, Chief, Fire and Rescue Department, Director of Emergency Management, County Sherriff, and County Chief Technology Officer. A steering committee of senior managers of the stakeholder agencies and a 'Tiger Team' of IT Department specialists manage the project activities. Through a competitive solicitation, Intergraph was selected as the core solution, with a variety of third party best in breed products for certain specific applications and supporting tools, such as Zoll for Fire Department Incident Management and EMS systems.

2.9 Legacy System Replacement (FOCUS)

Fairfax County government and school system have embarked on a multi-year, joint initiative to modernize the portfolio of enterprise systems that support finance (FAMIS), human resources (government: PRISM/ schools: LAWSON), budget (BPREP), procurement (CASPS) and related administrative applications with an integrated approach that has the flexibility to meet current and future requirements. The project seeks to mitigate the risk that current legacy antiquated and disjointed systems pose for system failure and inferior data. This project collaboration has been named 'FOCUS'.

The current 'stovepipe' legacy business systems are on various, old technology platforms using a variety of hardware and software architectures integrated through a number of interfaces and reporting tools. Previous assessments of these aging systems revealed that they are long past their projected useful lifecycle, do not meet the demands of human resource and financial management processing, have extremely limited employee self service capabilities, cannot support data analytics needs for transparency goals, or COOP, as well as technologically obsolete with on-going sustainability at great risk with high cost. System limitations continue to drive a proliferation of multi-step tasks to produce desired data and the development of numerous 'workaround' systems to gain necessary functionality currently not available. This has also resulted in an exponentially increased risk for security vulnerabilities. Due to their age, several of the current systems have no vendor support and rely on retirement eligible in-house staff maintenance. The systems were developed over twenty-three years ago in programming languages that are outdated and not practiced by the vast majority of the industry labor pool. Further these systems cannot be integrated with future mandated requirements and are a hindrance for County business transformation and efficiency opportunities.

Of these systems, the County government's Personnel Resource Information System Management (PRISM) is the most vulnerable to immediate obsolescence issues, it is over 23 years old and highly and customized based on historical County operational practices to the extent that it cannot be further enhanced. Further, attrition of in-house technical staff as they reach retirement age is jeopardizing future support for maintaining this legacy application – with the other systems approaching a similar expert support dilemma. Due to the impending lack of support, PRISM is the first of the legacy systems that will be replaced.

A governance body of senior officials of the County and school system stakeholder agencies has endeavored to identity the optimal strategy to pursue in its effort to procure an integrated financial/procurement/human resources/budget suite that will support agencies in the delivery of government and school services and activities, take advantage of best practices, provide the opportunity for multi-faceted data-driven decisions, significantly improve the efficiency and effectiveness of existing processes, enhance e-government initiatives and promote Telework opportunities, and aid in the transformation and standardization of financial and human resource processes. This initiative will foster an environment of change and redesign to allow for more efficient and effective processes.

The project seeks to mitigate the risk that antiquated and disjointed systems pose for system failure and inferior data. Automation and modernization will empower both employees and managers to execute processes more efficiently, and make the best strategic decisions based on the most timely and accurate information. This shifts the orientation of the system from that of a data repository to one of an information system solution. With the migration to a more standard, supportable database and development environment that incorporates workflow and Web technology, the project expects to:

- Create a contemporary enterprise scale single solution platform that reduces total cost of system management and data center operations;
- Enables collaborative environment where access to data and information, even from remote locations based on system "look and feel" flexibility;

- Provide seamless integration and interoperability of the new system with other existing applications;
- Reduce the number of shadow systems implemented in county agencies that augment personnel profile data and associated reconciliation processes between systems;
- Align the reporting strategy with the County government and school system overall data management and data warehousing strategy. Increases intuitive reporting, better data definition and analytics as well as data stewardship integrity and security; enable and support performance reporting and consistent information management throughout the organizations; Improve the quality and accessibility of information for decision support;
- Facilitate modern and fully integrated best business practices that are user-friendly and empower agencies and employees to improve their productivity;
- Enhance and improve functionality in back-office functional areas;
- Reduce redundant data entry, storage, and paper processing;
- Facilitate employee self service; agency workforce planning, and integration with WEB for enhanced public search, inquiry and engagement.

The County's approach for acquisition is for separation of the solicitations for product suite and implementer services. Steering committee members of the key stakeholder agencies for both County and Schools and staff participated in in-depth analysis of top tier products. After selection of the software solutions suite, a solicitation for the implementer will be competed, for a company that has both technical product knowledge and experience in the solution selected, and strong experience in government and schools K-12 business.

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